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SUPPORTING YOUNG CHILDREN AS THEY ENTER SCHOOL

A Research Literature Review

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Within the last decade, professionals have eagerly debated many aspects of preparing young children for kindergarten. Children are readied for school, intentionally or not, in various contexts: child care, preschool, Head Start, in-home care with parents or relatives. Political, social, and program dimensions in early care and education have received increased attention as in a recent National Research Council study, “Eager to Learn: Educating Our Preschoolers” (2000, Executive Summary).

This review will highlight studies that have implications for school readiness policies, practices, and that support parents and teachers. For purposes of this review, the term *school readiness* will refer to the concept of preparing young children for kindergarten. Studies were drawn primarily from original research studies found in academic database searches (e.g., Educational Research Information Center [ERIC], PsychInfo).

Policies Affecting School Readiness

Graue (1990) conducted an ethnographic study to understand the meaning of school readiness within the context of social constructs. Parents and teachers from three schools in a Rocky Mountain plains district were interviewed about their ideas and practices. School documents were reviewed, weekly classroom observations conducted, and field notes taken at each visit. Graue discovered that each school community had distinct and relative interpretations of what readiness meant. The study provided recommendations to refocus attention of parents, schools, and communities along with policy makers to support and to implement appropriate, comprehensive, and meaningful school readiness activities to prepare each child for kindergarten.

Gullo and Burton (1992) gave attention to controversy regarding academic readiness for young children based on effects of a child's age, preschool experience, and sex. They tested the hypothesis that early school and academic readiness predicted a child's later school success and that chronological age, sex, biological, and experiential factors played a significant role. Preschoolers, ages 3 – 5 years from a large urban school were selected by lottery. Participants included children from low-income households, Head Start classrooms, those with special needs, and many of African American and Hispanic background. Norm-referenced instruments measured each child's academic achievement. Researchers discovered sex was not a significant predictor of academic readiness whereas previous preschool experience made a significant difference. Despite limitations, data revealed preschool experiences were beneficial for children identified as either *at-risk* or not at-risk. The study held policy implications for investing in preschool programs for all children.

Five years later a study was conducted to test Gesell's theory that developmentally immature children would experience less learning problems and outperform matched counterparts if they participated in an extra year of kindergarten. Buntaine and Costenbader (1997) reviewed cumulative school records of third, fourth, and fifth graders from a predominantly White, upper middle-class, suburban upstate New York public school. In addition to Gesell Readiness Test scores, researchers reviewed scores from the Stanford Achievement Test and Pupil Evaluation of Progress scores routinely administered to second graders and third grade reading and math students, respectively. Records were reviewed on 90 pairs of children, those who had experienced an extra year of kindergarten and those who had not. Through statistical procedures, researchers disproved Gesell's theory. Furthermore, there

were no significant higher incidence of special services for “treatment” boys and “non-treatment” girls. Authors suggested schools should redirect resources and establish policies to enhance regular kindergarten programs that meet all children’s needs regardless of their linguistic, cognitive, experiential, and developmental differences.

Other scientific evidence of the effectiveness of early childhood education was explored by Gorey (2001) who tested the hypotheses that young children develop cognitive ability in diverse settings and that quality programs produce larger effects. In a meta-analysis, a sample of 35 original studies was examined from fourteen states, one Canadian province, and Israel, all of which explored at-risk factors for school failure. Studies focused on typically developing children below age five. Criteria of studies were: used quasi-experimental comparison or randomized experimental control group; assessed pretest equivalence among the sample; and detailed statistical findings. Results showed strong support that early childhood education is highly effective as preventive intervention for cognitive and behavioral development of preschoolers. Also, correlations were significant between intensity of the intervention and positive effect on children with effects maintained into adulthood.

Kindergarten entrance age has become more controversial in recent years. Stipek and Byler (2001) studied the value of delaying children’s entry into kindergarten. They expected *redshirting* to be uncommon among culturally diverse, low-income families and that schools pressure parents to withhold children from kindergarten because of academic readiness issues. Researchers used achievement assessments over 60-month period from 237 Caucasian, African American, and Latino children enrolled in northeastern United States rural schools. Children self-rated their feelings about teachers and school and perceptions of literacy and math skills.

Teachers rated children's academics as well as their own perceptions of children's social competence. No evidence was found indicating younger entrance age had negative effects on academic achievement of children by third grade. The study ultimately supported policies for earlier rather than later school entry.

One northeast Louisiana parish sought to describe existing resources and develop recommendations for enhancing programs and services for young children and their families. Six coalitions analyzed at-risk indicators in areas of child health and well-being, student readiness, school readiness, parent training, and funding. Researchers (Stokes & Ramey, 2001) collaborated with coalition members to develop a model that reflected a systems approach to support the readiness needs of students. The model and review of indicators formed basis for recommendations that demonstrated a need for the community to expand and develop comprehensive, quality early childhood preschool settings to support student (i.e. school) readiness needs of young children. Emphasis was placed on stronger collaborations among preschools and health services as well as Head Start and child care.

Practices that Support Children's School Readiness

A longitudinal study by Ramey et al. (2000) was conducted to report on the national Head Start/Public Early Childhood Transition Demonstration. Thirty-one demonstrations across the country focused on the hypotheses that comprehensive, continuous (i.e., transition) Head Start-like services provided through third grade would address the so-called *fade out* effect of children's academic gains. Over 7,500 former Head Start children and families enrolled in two cohorts (1992/93 and 1993/94). Transition services were provided to randomly assigned project and comparison schools whose majority children lived in low-income households. Various

measures examined children's reading, math, and social skills. Teachers were asked to rate children's abilities and progress. Findings showed most significant gains in the first two years of public school and continued progress through third grade. Although reading scores at kindergarten entrance were below national average per Woodcock-Johnson Tests of Achievement, scores at end of second and third grade years increased to national averages. Similar gains were shown in math. Results concluded transition services provided through third grade may support comprehensive school readiness needs of children. Furthermore, transition practices may support children's increased academic performance at national norms.

Schools continue to investigate appropriate school readiness screening instruments. Many schools typically engage in the practice of prekindergarten screening and assessment. Costenbader, Roher, and Difonzo (2000) developed a survey in collaboration with early childhood professionals from a rural and a suburban school district in upstate New York. The survey gathered descriptive information about screening practices from 755 school districts in New York. Thirty percent of the responding districts used locally designed instruments. Ten percent used commercial, standardized instruments. In 20% of districts, parents were encouraged to delay their child's kindergarten entry based on screening. The study raised concerns about use of locally designed screening instruments that were inadequate for predicting school success and about schools' awareness of limitations of standardized screening instruments. Implications were that schools should employ other practices to meet developmental needs of age-eligible children as they enter kindergarten.

Along with screening and assessment instruments, there are also curriculum-based measures used to determine students' deficient readiness skills. VanDerHayden and colleagues

(2001) tested the hypothesis that early intervention and appropriate measures may help remediate readiness deficits in young children. Probes were constructed to identify students that would benefit from further reading, math, and writing readiness interventions. A sample of 107 children from two southern suburban Louisiana public schools were administered probes by teachers. Forty students out of the sample were randomly selected for validity phase of study that included administering subtests from standardized, norm-referenced basic skills and early literacy achievement tests. Despite limitations, researchers found readiness probes could be utilized in natural classroom environments to more effectively assess children's academic performance. The study supported the utility of such probes by practitioners among students with identified academic deficits.

Another national study explored transition practices (Early, Pianta, Taylor, & Cox, 2001) and examined the hypothesis that school-centered transition practices had three characteristics: 1) provided outreach to families, preschools, and communities; 2) looked back in time to make connections before child entered school; and 3) provided activities of appropriate intensity. Using data from the National Center for Early Development and Learning (NCEDL) Transition Practices Survey (stratified, random sample of over 10,000 kindergarten teachers), researchers described transition practices and identified transition barriers. Between-group comparisons were conducted from over 3,500 questionnaires. Main findings showed that teachers with training in transition activities made efforts to vary activities. Delays in obtaining class lists created barriers to optimal transition practice. Also, schools need to create ready environments rather than holding high expectations of individual children's school readiness.

Pianta, Kraft-Sayre, Rimm-Kaufman, Gercke and Higgins (2001) explored transition practices and activities that are built collaboratively. A Collaborative Design Team (CDT) was established from a cross section of early childhood professionals. Members collectively identified community needs for transition to kindergarten and participated in all aspects of data gathering. CDT developed an ecological conceptual model that emphasized transition/continuity activities over longer time periods. Teachers and staff completed various instruments including “Transition to Kindergarten Activities Questionnaire”. Parents answered similar questions in interviews. Three themes emerged: a need for various activities, building parent-teacher relationships, and emphasizing importance of preschool staff to support children’s school readiness needs.

Some states have provided public preschool education for several years. The Michigan School Readiness Program (MSRP) began as a pilot in 1985. Funding was made available in 1995 for evaluating MSRP effectiveness for children and parents, including parent involvement. Xiang and Schweinhart (2002) conducted a longitudinal study. The target population included children living in poverty, at risk for school failure and school readiness. Measures included the High/Scope Child Observation Record, School Readiness Rating Scale, and school records. Parent outcomes were provided via parent interviews and Child and Family Background Questionnaire. Program quality was assessed by High/Scope Program Quality Assessment. Major findings in area of school readiness as compared to non-program participants showed MSRP children scored significantly higher in over all development at kindergarten, were less likely to be retained in second through fourth grades, and had higher reading and math

scores. Finally, MSRP parents were more involved in school activities and with teachers in their child's first three years of school.

Understanding Parent and Teacher Involvement

How do parents and teachers assist young children in preparing for kindergarten? Jewett et al. (1998) engaged in a narrative study of four elementary teachers to understand what is involved in effectively supporting school readiness (i.e., transition) of children with special needs. Researchers used data from teachers' reflective journal writings from April to December 1996. Results were categorized into five transition tasks. A theme of stressfulness emerged based on many challenges for teachers. Researchers suggested schools must acknowledge teachers' overwhelming responsibility and assist in alleviating stressors by providing additional support and resources.

In 1999, Parker, Boak, Griffin, Ripple, and Peay looked at parent-child relationships that effect school readiness. Based on a Head Start parent-involvement model, a longitudinal pretest/posttest design was conducted in a large urban city Head Start agency. The sample consisted largely of Puerto Rican immigrant mothers (82% predominantly Spanish-speaking). Valid and reliable measures were suited for the population. Main findings were that children had better school readiness outcomes when parents spent more time helping them at home. Parents that had better understanding of the importance of play in child development also contributed to better cognitive outcomes for children and positive classroom behaviors. An unexpected result was that the greater number of activities and parents' expectations of children in the home significantly linked to negative child outcomes. Findings supported a hypothesis that parent-child relationships and home environment were associated with school readiness.

Another Head Start study explored teachers and children as co-creators of behaviors characterized as *at risk* or *promise* as children transitioned to kindergarten. Researchers conducted an ethnographic study in 1993 that included observations over a 6-month period at a local Head Start/Transition Demonstration site. Skinner, Bryant, Coffman, and Campbell (1998) followed 21 students in the target group through kindergarten. Field notes were analyzed which revealed evidence that even in the first weeks of school, teachers and kindergartners showed signs of co-constructing practices that moved children onto a path of school failure. Issues of race and culture became part of the discourse and co-construction. Teachers held unrealistic expectations to “fix” the *at risk* child. Traditional learning environments did not support children’s ongoing development whereas those who spent more time and energy drawing out children’s individual strengths co-created constructs of *promise*. Ethnographers acknowledged that children’s academic *promise* was a joint responsibility of schools, homes, communities, and larger society.

A survey research study analyzed school readiness expectations and beliefs of parents and teachers. The survey entitled Community Attitudes on Readiness for Entering School (CARES) was mailed and/or distributed to all kindergarten and preschool teachers along with selected parents of children born 1993 or 1994. Nine beliefs were identified based on five dimensions of the National Education Goals Technical Planning Group (Goal 1). Piotrkowski, Botsko, and Matthews (2002) found that parents showed significant agreement about what knowledge their children needed to enter kindergarten. African American and Hispanic parents believed it was important for children to communicate well in English. Furthermore, concerns

were raised regarding availability and quality of resources in high-needs communities and whether sufficient planning occurred between preschool and kindergarten teachers.

Early literacy is a key component of preparing young children for school. Bergin (2001) looked at the affective quality of early literacy parent-child interactions. The study was based on hypotheses that quality, sensitivity, frequency, and task persistence of parents made a difference in children's early literacy skills. Parents and children from a White, working class Arizona neighborhood were studied in simulated home settings. Trained observers coded interactions from videotape. Findings showed that child and parent affection related to children's reading fluency and positive attitudes toward reading. Bergin's research supported other early literacy studies that highlight the importance of changing reading habits rather than increasing reading activities.

Few studies have explored the relationship between parenting behaviors and children's school performance, including academic socialization. A study by Hill (2001) questioned these relationships, primarily among African American and low-income parents. A total of 103 African- and Euro-American kindergartners and their mothers from a southeastern semi-urban city provided prereading and premath child data from two subscales of the Metropolitan Readiness Test. Parents and/or teachers responded to their involvement, parenting behaviors and parents' expectations of their child's school performance. Parenting behaviors and teachers' perceptions supported the hypothesis that parents and teachers influence early literacy development of children from low-income households.

Social competence is another element of school readiness. Webster-Stratton, Reid, and Hammond (2001) evaluated the effectiveness of two empirically validated parent and teacher

training programs. The “Incredible Years” training intervention addressed risk factors associated with young children’s conduct behavior problems and protective factors. Thirty-six Puget Sound and Seattle Public Schools Head Start classrooms were randomly assigned (2/3 intervention and 1/3 control). Pre and post assessments, observations of mother-child interactions by trained observers, along with parent and teacher training activities were implemented. Booster parent training sessions were provided after children entered kindergarten. All curricula focused on positive discipline and stress coping skills. Test measures were selected from: Parenting Practices Inventory, Coder Impressions Inventory, Parent Involvement Questionnaire, Teacher Involvement Questionnaire, Eyberg Child Behavior Inventory, Child Behavior Checklist, Social Competence and Behavior Evaluation, ADHD rating scale, multiple option observation system for experimental studies (MOOSSES), Social Health Profile, and Teacher Coder Impression Inventory. Findings suggested school-based, integrated parent and teacher training programs may be useful strategies for reducing risk factors and increasing protective factors for children in the context of school readiness. Gains were maintained at one-year follow-up and held true for culturally diverse, socioeconomically disadvantaged populations.

Lastly, it is important to consider forms of pre-kindergarten care other than formal preschool settings. Tout, Zaslow, Papillo, and Vandivere (2001) wanted to understand the patterns of non-parental care that enhanced children’s development and school readiness. The questioned and examined the variety of family needs and all families’ choices regardless of parents’ employment status. This descriptive study used 1997 National Survey of America’s Families to investigate the many experiences of young children in non-parental care. Five types of arrangements were examined along with frequency of participation, parent’s income and

employment status. Evidence indicated early care and education non-parental arrangements are a support for employed parents and school readiness preparation (academic and social) for children, especially those age 3 and above. Family income, race/ethnicity, level of mother's education were other factors associated with preschoolers' participation in center-based non-parental care. Findings demonstrated center-based care, typically found to be of higher quality in producing positive child outcomes, may be less accessible for low-income families. Implications were that some parents need support in providing the best care for their children.

In summary, these studies provide consideration for future research in policy, practice, and training to support parents and teachers as they address young children's entry into kindergarten. Although generalizability is limited, it is important to consider themes that emerged from the findings. Low-income communities and families, in particular, may benefit from additional comprehensive, quality, early care and education programs. Such programs, according to the literature, ultimately provide a brighter future for all young children.

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